



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/820,876

04/09/2004

Daniel Breen

SSB0005

9271

75127

7590

04/30/2008

KING & SPALDING LLP (CITI CUSTOMER NUMBER)

ATTN: GEORGE T. MARCOU

1700 PENNSYLVANIA AVENUE, NW

SUITE 200

WASHINGTON, DC 20006

EXAMINER

SUBRAMANIAN, NARAYANSWAMY

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

04/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |   |                                     |  |
|------------------------------|---|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/820,876        | <b>Applicant(s)</b><br>BREEN ET AL. |  |
|                              | <b>Examiner</b><br>Narayanswamy Subramanian | <b>Art Unit</b><br>3691             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This office action is in response to applicants' communication filed on April 7, 2008.

Amendments to claims 1, 12, and 28 have been entered. Claims 1-30 are currently pending and have been examined. The objections to the specification, rejections and response to arguments are stated below.

#### *Specification*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to support the subject matter set forth in the claims. The specification, as originally filed does not provide support for the invention as now claimed.

The test to be applied under the written description portion of 35 U.S.C. § 112, first paragraph, is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of later claimed subject matter. Vas-Cat, Inc. v. Mahurkar, 935 F. 2d 1555, 1565, 19 USPQ2d 111, 1118 (Fed. Cir. 1991), reh'rg denied (Fed. Cir. July 8, 1991) and reh'rg, en banc, denied (Fed. Cir. July 29, 1991).

Claims 1-30 include the limitations "a first call option having a second potential financial benefit that is based upon and is the same as the first potential financial benefit". However, the specification does not provide a written description disclosure to support the claimed limitations of "a first call option having a second potential financial benefit that is based upon and is the same as the first potential financial benefit".

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, claims 1-30 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

For the art rejections given below, the claims are interpreted in light of 35 U.S.C. § 112, first paragraph rejections discussed above.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 1-30 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory Subject matter.

35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" (emphasis added). It is not clear as to which statutory class the claimed invention belongs.

**The claimed invention does not fall in the process category for the following reason.**

Quoting from *In re Comiskey* (No. 06-1286, Federal Circuit) **“The Supreme Court has recognized only two instances in which such a method may qualify as a section 101 process: when the process ‘either [1] was tied to a particular apparatus or [2] operated to change materials to a ‘different state or thing.’”** *In Diehr*, the Supreme Court confirmed that a process claim reciting an algorithm could state statutory subject matter if it: (1) is tied to a machine or (2) creates or involves a composition of matter or manufacture.<sup>12</sup> 450 U.S. at 184. There, in the context of a process claim for curing rubber that recited an algorithm, the Court concluded that “transformation and reduction of an article ‘to a different state or thing’ is the clue to the patentability of a process claim that does not include particular machines.” *Id.* (quoting *Benson*, 409 U.S. at 70);<sup>13</sup> see also *In re Schrader*, 22 F.3d 290, 295 (Fed. Cir. 1994) (holding when a claim does not invoke a machine, “§ 101 requires some kind of transformation or reduction of subject matter”). Thus, a claim that involves both a mental process and one of the other categories of statutory subject matter (i.e., a machine, manufacture, or composition) may be patentable under § 101. However, mental processes—or processes of human thinking—standing alone are not patentable even if they have practical application. The Supreme Court has stated that “[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” *Benson*, 409 U.S. at 67 (emphasis added). In *Flook* the patentee argued that his claims did not seek to patent an abstract idea (an algorithm) because they were limited to a practical application of that idea—updating “alarm limits” for catalytic chemical conversion of hydrocarbons. 437 U.S. at 586, 589-90. The Court rejected the notion that mere recitation of a practical application

Art Unit: 3691

of an abstract idea makes it patentable, concluding that “[a] competent draftsman could attach some form of post-solution activity to almost any mathematical formula.” *Id.* at 590. Since all other features of the process were well-known, including “the use of computers for ‘automatic monitoring-alarming,’” the Court construed the application as “simply provid[ing] a new and presumably better method for calculating alarm limit values.” *Id.* at 594-95. The 14 See *AT&T*, 172 F.3d at 1355, 1358 (holding patentable “a process that uses the Boolean principle in order to determine the value of the PIC indicator” and that “require[d] the use of switches and computers”); *State Street Bank*, 149 F.3d at 1373 (“[W]e hold that the transformation of data . . . by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm.” (emphases added)); *Alappat*, 33 F.3d at 1544 (“This is not a disembodied mathematical concept which may be characterized as an ‘abstract idea,’ but rather a specific machine to produce a useful, concrete, and tangible result.” (emphases added)); *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1058-59 (Fed. Cir. 1992) (holding patentable a method for analyzing electrocardiograph signals for the detection of a specific heart condition that used “electronic equipment programmed to perform mathematical computation”). Court held the application unpatentable because “if a claim [as a whole] is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory.” 437 U.S. at 595 (quoting *In re Richman*, 563 F.2d 1026, 1030 (CCPA 1977)). Following the lead of the Supreme Court, this court and our predecessor court have refused to find processes patentable when they merely claimed a mental process standing alone and untied to another category of statutory subject matter even when a practical application was claimed. In *Schrader* we held unpatentable a

Art Unit: 3691

“method constitut[ing] a novel way of conducting auctions” by allowing competitive bidding on a plurality of related items. 22 F.3d at 291. In doing so, we rejected the patentee’s argument that the process used a machine. Two of the alleged machines—a “display” in the front of the auction room and “a closed-circuit television system” for bidders in different cities—were not claimed by the patent, and the third—a “record” in which bids could be entered—could be “a piece of paper or a chalkboard.” *Id.* at 293-94. We therefore concluded that the patent impermissibly claimed unpatentable subject matter. Similarly, in *In re Warmerdam*, 33 F.3d 1354 (Fed. Cir. 1994), we held unpatentable a process for controlling objects so as to avoid collisions because the key steps of “locating a medial axis” and “creating a bubble hierarchy” described “nothing more than the manipulation of basic mathematical constructs, the paradigmatic ‘abstract idea.’” *Id.* at 1360. A machine was not required, *id.* at 1358, nor was there any indication that the process operated on a manufacture or composition of matter. Decisions of our predecessor court are in accord. *In re Meyer*, 688 F.2d 789, 796 (CCPA 1982), held that “a mental process that a neurologist should follow” was not patentable because it was “not limited to any otherwise statutory process, machine, manufacture, or composition of matter.” *Id.* at 795. Similarly, *In re Maucorps*, 609 F.2d 481 (CCPA 1979), held that an invention “ultimately . . . directed toward optimizing the organization of sales representatives in a business” was unpatentable. *Id.* at 482, 486. See also *Alappat*, 33 F.3d at 1541 (“*Maucorps* dealt with a business method for deciding how salesmen should best handle respective customers and *Meyer* involved a ‘system’ for aiding a neurologist in diagnosing patients. Clearly, neither of the alleged ‘inventions’ in those cases falls within any § 101 category.”). **The steps of the method are untied to another category of**

Art Unit: 3691

**statutory subject matter and hence the claimed invention does not qualify as a process under 35 U.S.C 101.**

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marlowe-Noren (US Pub. No. 2004/0193536 A1) in view of Ritchken Reference.

Claim 1, Marlowe-Noren teaches the step of issuing a hybrid security comprising issuing a convertible security and two other instruments related to the convertible security (See Marlowe-Noren Abstract, Paragraphs 18-30). The conversion ratio for the convertible security is interpreted to include 100.

Marlowe-Noren does not explicitly teach the feature of a call spread with the counterparty, comprising the steps of: buying from the counterparty a first call option having a second potential financial benefit the same as the first potential financial benefit; and selling to the counterparty a second call option with a higher strike price than the first call option that when exercised provides a third potential financial benefit different from the second potential financial benefit. The limitation of “that when exercised provides a third potential financial benefit different from the second potential financial benefit” is interpreted as intended use of the respective option and hence not given patentable weight.



Ritchken Reference teaches a call spread comprising buying from a counterparty a first call option and selling to the counterparty a second call option with a higher strike price than the first call option (See Ritchken bottom of page 48). Call options that are traded on the exchange enable investors to purchase 100 shares of the underlying instrument. In other words call options that are traded on the exchange provide the same benefit as the convertible security.

Both Ritchken and Marlowe-Noren are concerned with providing a hybrid financial instrument to the user. It would have been obvious to one of ordinary skill in the art to include the teachings of Ritchken to the disclosure of Marlowe-Noren. The combination of disclosures suggests that holders would have benefited from exercising the option without extinguishing the underlying convertible instrument.

Claim 12, Marlowe-Noren teaches the step of issuing a convertible security and two other instruments related to the convertible security (See Marlowe-Noren Abstract, Paragraphs 18-30). The conversion ratio for the convertible security is interpreted to include 100.

Marlowe-Noren does not explicitly teach the feature of issuing a first call option from a first counterparty to the issuer having a second potential financial benefit the same as the first potential financial benefit; and issuing a second call option from the issuer to either the first counterparty or a second counterparty that when exercised provides a third potential financial benefit different from the second potential financial benefit. The limitation of “that when exercised provides a third potential financial benefit different from the second potential financial benefit” is interpreted as intended use of the respective option and hence not given patentable weight.

Ritchken Reference teaches a call spread comprising buying from a counterparty a first call option and selling to the counterparty a second call option with a higher strike price than the first

Art Unit: 3691

call option (See Ritchken bottom of page 48). Call options that are traded on the exchange enable investors to purchase 100 shares of the underlying instrument. In other words call options that are traded on the exchange provide the same benefit as the convertible security.

Both Ritchken and Marlowe-Noren are concerned with providing a hybrid financial instrument to the user. It would have been obvious to one of ordinary skill in the art to include the teachings of Ritchken to the disclosure of Marlowe-Noren. The combination of disclosures suggests that holders would have benefited from exercising the option without extinguishing the underlying convertible instrument.

Claim 28, Marlowe-Noren teaches a method for performing a financial transaction, the method comprising the steps of: issuing from the issuer to the investor the convertible security providing a first potential financial benefit, wherein the convertible security is convertible into a first predetermined number of units of an underlying security and buying by an issuer from the first counterparty, with at least a portion of the proceeds from the issuance of the convertible security, a second financial instrument upon the occurrence of a first predetermined event; and (See Marlowe-Noren Abstract, Figure 2, Paragraphs 18-30). The conversion ratio for the convertible security is interpreted to include 100.

Marlowe-Noren does not explicitly teach the feature of the second financial instrument being a call option and selling by an issuer, simultaneous to the buying of the first call option, to the second counterparty the second call option with a higher strike price than the first call option that when exercised provides a third potential financial benefit different from the second potential financial benefit, wherein the second call option exercisable to purchase a third predetermined number of units of the underlying security upon the occurrence of a second predetermined event.

Art Unit: 3691

However, the limitation “that when exercised provides a third potential financial benefit different from the second potential financial benefit, wherein the second call option exercisable to purchase a third predetermined number of units of the underlying security upon the occurrence of a second predetermined event” is interpreted as intended use of the respective option and hence not given patentable weight. This limitation does not affect the steps of buying a call option by an issuer from the first counterparty and selling by an issuer, simultaneous to the buying of the first call option, to the second counterparty the second call option with a higher strike price than the first call option.

Ritchken Reference teaches a call spread comprising buying from a counterparty a first call option and selling to the counterparty a second call option with a higher strike price than the first call option (See Ritchken bottom of page 48). Call options that are traded on the exchange enable investors to purchase 100 shares of the underlying instrument. In other words call options that are traded on the exchange provide the same benefit as the convertible security.

Both Ritchken and Marlowe-Noren are concerned with providing a hybrid financial instrument to the user. It would have been obvious to one of ordinary skill in the art to include the teachings of Ritchken to the disclosure of Marlowe-Noren. The combination of disclosures suggests that holders would have benefited from exercising the option without extinguishing the underlying convertible instrument.

Claims 2-11, 13-27 and 29-30, the features in these claims are either disclosed in the combined disclosure of Ritchken and Marlowe-Noren or are old and well known in the art. Combining the features of derivative instruments with traditional instruments like convertible bonds/preferred stocks makes the offering more attractive to the investors compared to

traditional straight offering and it also provides tax advantages to the issuer. Hence it would have been obvious to include these features to the combined disclosures of Marlowe-Noren and Ritchken.

### ***Response to Arguments***

10. In response to Applicant's arguments "The Examiner has already acknowledged that these claims are patentable subject matter under 35 U.S.C. § 101 .... present rejection fails to set forth with any particularity why claims 1-30 are directed to non-statutory subject matter. The recitation of § 101 and a "laundry list" of case law does not explain why claims 1-30 are directed to non-statutory subject matter. Because these claims were already amended and acknowledged as overcoming § 101, the Examiner has not presented any reasons why these claims still fail to overcome § 101", the Examiner respectfully disagrees. The rejection made under 35 U.S.C. § 101 in the office action mailed on June 14, 2006 was based on the claimed invention not producing any useful, tangible and concrete result. However on September 20, 2007 the US Court of Appeals (deciding on *In re Comiskey*) clarified as to what constitutes a process under 35 U.S.C. § 101. The current rejection under 35 U.S.C. § 101 is made on the basis of the *In re Comiskey* decision. Contrary to Applicant's assertion that the Examiner has not presented any reasons why these claims still fail to overcome § 101, the Examiner has clarified the rejection by quoting from the *In re Comiskey* decision as to why the claimed invention does not qualify as a process under 35 U.S.C. § 101. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how they overcome the rejection under 35 U.S.C. § 101.

Applicant's other arguments with respect to pending claims have been considered but are not persuasive.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (571) 272-6751. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached at (571) 272-6771. The fax number for Formal or Official faxes and Draft to the Patent Office is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 3691

may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Narayanswamy Subramanian/  
Primary Examiner  
Art Unit 3691

April 21, 2008